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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,596	01/10/2002	Tetsuya Araki	500.40786CX1	5377
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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER TARAE, CATHERINE MICHELLE	
			ART UNIT 3623	PAPER NUMBER

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,596

Applicant(s)

ARAKI ET AL.

Examiner

C. Michelle Tarae

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/981,756.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/22/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a Final Office Action in response to the communication received on May 19, 2006. Claims 13, 14 and 25 have been amended. Claims 13-25 are now pending in this application.

Information Disclosure Statement

2. The examiner has reviewed the patents supplied in the Information Disclosure Statement (IDS) provided on February 22, 2006.

Response to Amendments

3. Applicant's amendments to claims 13, 14 and 25 are acknowledged. The amendments to claims 13, 14 and 25 are sufficient to overcome the art rejections set forth in the previous Office Action. Therefore, the previous art rejections using Kanaya et al (U.S. 6,493,675) are withdrawn. A new art rejection for claims 13-25 is set forth below.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "said extracted one item" in line 15. There is insufficient antecedent basis for this limitation in the claim because before line 15, the claim recites that *multiple* items are *extracted* and *one* item is *selected*, thereby making the claim unclear as to how many items are extracted and selected. Based on the recitation of the other independent claims, Examiner is interpreting the claim to mean that multiple items are extracted and one item is selected from those extracted items. Examiner suggests amending the claim to recite, "said selected one item" to clarify the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. (U.S. 5,581,691).

As per claim 13, Hsu et al. discloses a server computer that conducts item allocation in a workflow system that processes items in computers in accordance with a previously defined business process, said server computer being connected to a plurality of other computers and a database for storing items, said server computer comprising:

an item extraction condition table including an item acquisition range condition and an item selection key corresponding to said business process (col. 6, lines 20-26; col. 9, lines 11-35; col. 10, lines 19-32; Figures 7 and 8; Input condition tables and output condition tables are used to select, or extract, certain records, if certain conditions related to those records are met. The workflow database is used to maintain data that represents business processes.);

a storage for storing a plurality of items received from said other computers (col. 4, lines 33-43; A workflow description database stores data representing workflow that has been defined for a plurality of computers. Additionally, a history database is a log record of current workflows occurring between a plurality of computers.); and

an item allocation processing section for receiving an item acquisition request containing a business process identifier from a computer included in said other computers (col. 12, lines 4-7; Requests representing new workflow starts are received from the computers.), extracting, based on an item acquisition range condition included in said received item acquisition request, an item satisfying said item acquisition range condition, selecting one item by using an item selection key and information corresponding to an item selection key included in said received item acquisition request, and transmitting one item to said computer included in said other computers that transmitted said item acquisition request (col. 6, lines 65-66; col. 8, lines 34-44; col. 9, lines 21-35; Figures 3 and 4; When input conditions match for a particular work/step type, that work/step is selected and instantiated to create a new workflow (i.e., it's

extracted). The work/step is selected using Step IDs, or keys. The work/step is transmitted to a designated output port.).

Hsu et al. does not expressly disclose extracting a *plurality* of items satisfying the item acquisition range condition; rather, Hsu et al. just extracts *one* item satisfying the item acquisition range condition despite the disclosure that a work item may have multiple conditions for execution (col. 8, lines 34-44). However, whether a plurality of items are extracted or one item is extracted is a matter of design choice for the system. Hsu et al. even discloses that the definitions for the workflows and how much work is included in each step of a workflow is a matter of programming choice on the part of the person defining the workflow (col. 5, lines 38-50). Ultimately, only *one item is selected in both the claim and in the disclosure of Hsu et al.* to execute work. At the time of the invention it would have been obvious to one of ordinary skill in the art for the system of Hsu et al. to extract a *plurality* of items satisfying the item acquisition range condition as opposed to selecting one item because, as disclosed by Hsu et al., the definition of the workflows and how they are comprised (i.e., how many work/step items they are comprised of) are a matter of programming choice on the part of the person defining the workflow. Providing a person with a plurality of items that satisfy a condition request to perform some type of work provides that person with an option to select which item they want to perform the desired work. Thus, by extracting a plurality of items that satisfy the item acquisition range condition provides a person with multiple options from which to select, thereby providing a flexible and user-friendly workflow system.

As per claim 15, Hsu et al. discloses a server computer that conducts item allocation in a workflow system according to claim 13, wherein said item selection key is an identifier added to said item acquisition request, time when said request has been received, or an identifier depending upon a worker who has transmitted said item acquisition request (col. 6, lines 65-66; col. 8, lines 34-44; col. 9, lines 21-35; Figures 3-5; When a work step is requested, its unique ID, or item selection key, is used to identify and select it. Thus, the item selection key is added to the item acquisition request in order to identify and select the work step that matches the condition.).

As per claim 17, Hsu et al. discloses a server computer that conducts item allocation in a workflow system according to claim 13, wherein said item selection key is a value depending upon a client program that operates in each of said other computers (col. 4, lines 17-24 and 33-39; col. 6, lines 31-35; Figures 1, 5 and 6; Each computer interconnected on the network uses a workflow management system to communicate workflow data to and from the workflow description database. The workflow description database uses tables and unique IDs, or keys, to identify and select data. Therefore, the selection key value must be a value that all the computers on the network understand.).

As per claim 19, Hsu et al. discloses a server computer that conducts item allocation in a workflow system according to claim 17, wherein said value depending upon a client program that operates in each of said computers is a thread ID of the client program, a process ID of the client program, an object reference acquired from the client program, or an identifier of a connection formed from the client program to the

server at time of said item request (Figures 5-9; The workflow description database contains tables with IDs for Arc, Port and Flow Type (i.e., thread and connection formed), Step Type (i.e., process) and Application (i.e., object reference).).

As per claim 21, Hsu et al. does not expressly disclose a server computer that conducts item allocation in a workflow system according to claim 13, wherein said item selection key is either an IP address or an MAC address of each of said other computers. However, Hsu et al. does disclose using Port IDs to identify the component and port on the computer where data signals are to be sent and received (col. 8, lines 1-7) as well as various unique IDs to facilitate the workflow management (Figures 6, 7 and 11). It is old and well known that an IP/MAC address is a unique number that identifies a computer on a network. Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art for the system of Hsu et al. to use an IP/MAC address as an item selection key since the system of Hsu et al. already employs unique numbers as selection keys as well as Port IDs to identify ports on a computer where data signals are to be sent and received, and furthermore, since an IP/MAC address would identify the computer from which a request is being made or the computer that is to process the request, which further enhances the workflow management process of Hsu et al. by enabling the tracking of more detailed information related to the workflow process, the more detailed information being the identity of the computer where the workflow is to be initiated, sent or received.

As per claim 23, Hsu et al. discloses a server computer that conducts item allocation in a workflow system according to claim 13, wherein said item allocation

processing section operates for each of works of a business process stored in the server (col. 6, lines 20-31; The workflow system is used to model and facilitate business process schemas.).

As per claim 25, Hsu et al. discloses a workflow system comprising:

a plurality of client computers, a server computer being connected to said plurality of client computers and a database for storing item (col. 4, lines 33-43; Figure 1; A workflow description database stores data representing workflow that has been defined for a plurality of computers.),

wherein said server computer extracts a workflow control program, said workflow control program when executed causing said server to perform the steps of:

receiving item acquisition conditions and item acquisition requests from said client computers (col. 12, lines 4-7; Requests representing new workflow starts are received from the computers.);

extracting an item from among items stored in said database, based on an item acquisition range condition included in said received item acquisition requests to select an item by using an item selection key included in said item acquisition request (col. 6, lines 20-26; col. 9, lines 11-35; col. 10, lines 19-32; Figures 7 and 8; Input condition tables and output condition tables are used to select, or extract, certain records, if certain conditions related to those records are met. The workflow database is used to maintain data that represents business processes.); and

transmitting said extracted one item to said computer included in said client computers (col. 6, lines 65-66; col. 8, lines 34-44; col. 9, lines 21-35; Figures 3 and 4;

When input conditions match for a particular work/step type, that work/step is selected and instantiated to create a new workflow (i.e., it's extracted). The work/step is selected using Step IDs, or keys. The work/step is transmitted to a designated output port.),

wherein each of said client computers executes a workflow client program for causing said client computer to select items to be processed in the client computer from among items received from said server computer by using an item selection key (col. 2, lines 64-66; col. 6, lines 22-26 and 31-37; 174 item in Figure 4; item 174 in Figure 10; Each workflow step executes an application program to perform the work. Additionally, each computer uses a workflow management system to execute and track the progress of workflows.).

Hsu et al. does not expressly disclose extracting a *plurality* of items satisfying the item acquisition range condition; rather, Hsu et al. just extracts *one* item satisfying the item acquisition range condition despite the disclosure that a work item may have multiple conditions for execution (col. 8, lines 34-44). However, whether a plurality of items are extracted or one item is extracted is a matter of design choice for the system. Hsu et al. even discloses that the definitions for the workflows and how much work is included in each step of a workflow is a matter of programming choice on the part of the person defining the workflow (col. 5, lines 38-50). Ultimately, only *one item is selected in both the claim and in the disclosure of Hsu et al.* to execute work. At the time of the invention it would have been obvious to one of ordinary skill in the art for the system of Hsu et al. to extract a *plurality* of items satisfying the item acquisition range condition as opposed to selecting one item because, as disclosed by Hsu et al., the definition of the

workflows and how they are comprised (i.e., how many work/step items they are comprised of) are a matter of programming choice on the part of the person defining the workflow. Providing a person with a plurality of items that satisfy a condition request to perform some type of work provides that person with an option to select which item they want to perform the desired work. Thus, by extracting a plurality of items that satisfy the item acquisition range condition provides a person with multiple options from which to select, thereby providing a flexible and user-friendly workflow system.

Claims 14, 16, 18, 20, 22 and 24 recite substantially similar subject matter as claims 13, 15, 17, 19, 21, 23 and 25 above. Therefore, claims 14, 16, 18, 20, 22 and 24 are rejected on the same basis as claims 13, 15, 17, 19, 21, 23 and 25 above.

Response to Arguments

8. Applicant's arguments are moot in view of the new grounds of rejections, which were necessitated by amendment.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Chandra et al. (U.S. 6,058,389) discusses a message queuing in a database system;
- Ouchi (U.S. 6,170,002) discusses workflow management system that match objects to request criteria;
- Ghoneimy et al. (U.S. 5,524,241) discusses tracking long-running computations using input/output conditions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Michelle Tarae (formerly, C. Michelle Colon) whose telephone number is 571-272-6727. The examiner can normally be reached Monday – Friday from 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 571-272-6729.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



C. Michelle Tarae
Patent Examiner
Art Unit 3623

July 26, 2006